

Minimum Error of Closure Less Than 1 in 7,200'

Source of Elevation U.S.G.S BM #165 RHP ON PICKENPAW RUN ROAD

Elev = 980 (979.89)

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

Signed: John W. Horne

- Fracture.....
- New Location.....
- Drill Deeper.....
- Abandonment.....

Map No. \_\_\_\_\_

Squares: N S E W

Company U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

Address P.O. BOX 880, MORGANTOWN W.VA. 26505

Farm WALTER B. SMITH

Tract \_\_\_\_\_ Acres 15 Lease No. \_\_\_\_\_

Well (Farm) No. PI-2 Serial No. \_\_\_\_\_

Elevation (Spirit Level) 1951.79 MANNINGTON 15'

Quadrangle GLOVER GAP W.VA. (7.5') SW

County WETZEL District GRANT

Surveyor John W. Horne

Surveyor's Registration No. W.VA. L.L.S.#72-24

File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_

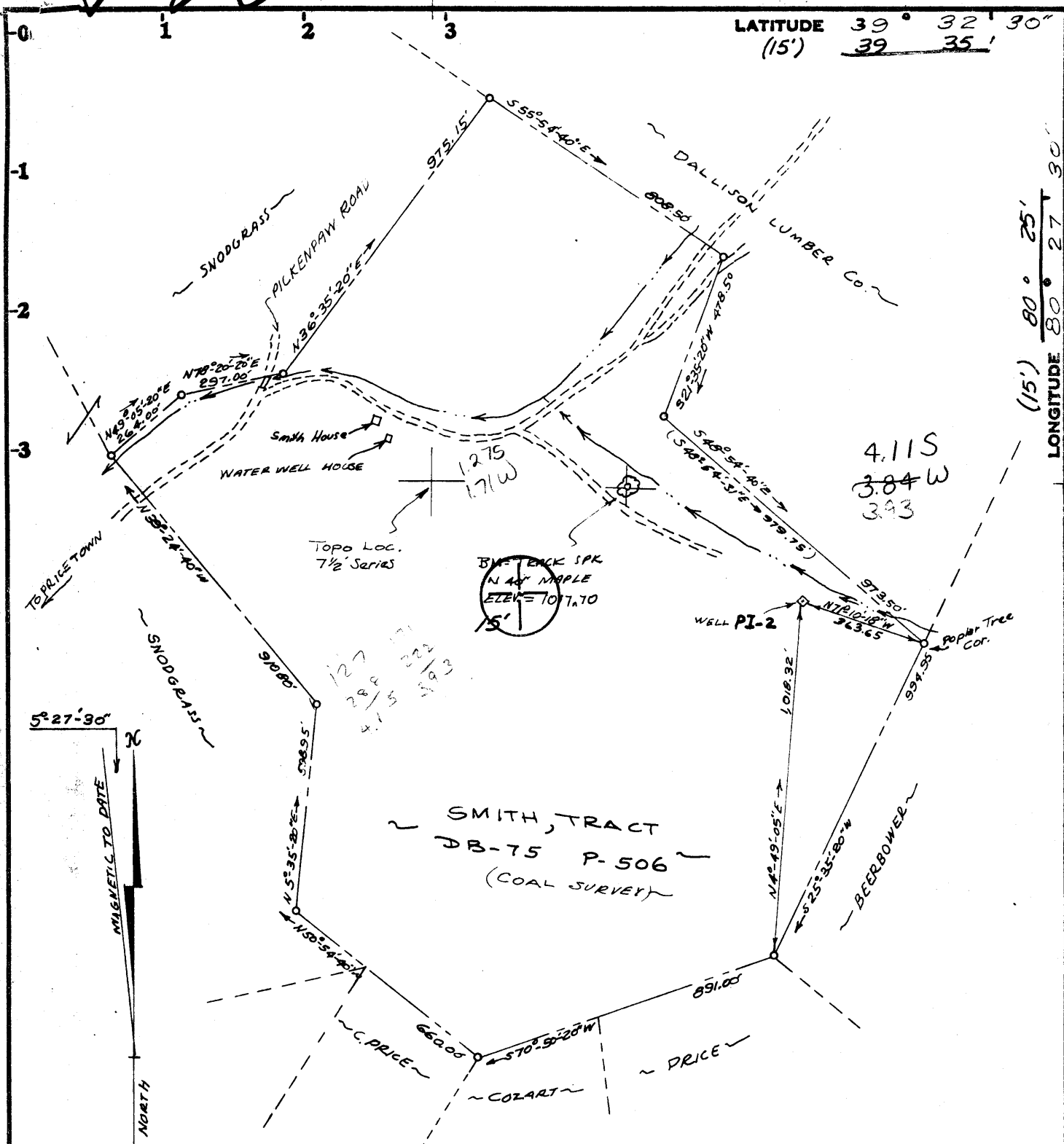
Date JAN. 10 1977 Scale 1" = 400'

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION  
CHARLESTON

**WELL LOCATION MAP**  
FILE NO. WET-626-P

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500 latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing. **47-103**



Minimum Error of Closure Less Than 1 in 7200'

Source of Elevation U.S.G.S BM #165 RHP on Pickenpan Run Road  
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Signed: John W. Horne  
 Squares: N S E W

Map No.

Company	U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION	
Address	P.O. BOX 880, MORGANTOWN, W.VA. 26505	
Farm	WALTER B. SMITH	
Tract	Acres	Lease No.
Well (Farm) No.	PI-2	Serial No. SW
Elevation (Spirit Level)	1951.79 MANNINGTON 15'	
Quadrangle	GLOVER GAP W.VA. (7.5')	
County	WETZEL	District GRANT
Surveyor	John W. Horne	
Surveyor's Registration No.	W.VA. L.L.S. #72 JV	
File No.	Drawing No.	
Date	JAN. 12, 1977 Scale 1" = 400'	

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 CHARLESTON

**WELL LOCATION MAP**  
 FILE NO. WET-626

+ Denotes location of well on United States Topographic Maps, scale 1 to <sup>62,500</sup>/<sub>24,000</sub> latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing. 47-103



RECEIVED

SEP 29 1977

OIL & GAS DIVISION DEPT. OF MINES

STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS WELLS DIVISION

- Rotary [x] Spudder [ ] Cable Tools [ ] Storage [ ]

Quadrangle Glover Gap (7.5')

Permit No. WET - 626

WELL RECORD

Oil or Gas Well Coal Research (KIND)

Company ERDA, Morgantown Energy Research Center Address P. O. Box 880, Morgantown, WV, 26505 Farm Walter B. Smith Acres Location (waters) Headwaters of Pickenpaw Run Well No. Smith-ERDA-PI-2 Elev. District Grant County Wetzel The surface of tract is owned in fee by Walter B. Smith Address Smithfield, WV, 26437 Mineral rights are owned by Mr. & Mrs. Rex Smith Address Smithfield, WV, 26437

Table with columns: Casing and Tubing, Used in Drilling, Left in Well, Packers. Rows include tubing sizes (16, 13, 10-3/4, 8 1/4, 7, 5 3/16, 4 1/2, 3, 2) and packer details.

Drilling commenced 8-23-77 Drilling completed 9-1-77 Date Shot From To With Open Flow /10ths Water in Inch /10ths Merc. in Inch Volume Cu. Ft. Rock Pressure lbs. hrs. Oil bbls., 1st 24 hrs. WELL ACIDIZED (DETAILS) WELL FRACTURED (DETAILS)

Attach copy of cementing record. 10 3/4 -205' - 8-24-77 7" -906' - 9-2-77 CASING CEMENTED. SIZE No. Ft. Date Amount of cement used (bulk) 10-3/4-175sacks; 7"-290sacks Name of Service Co. Halliburton COAL WAS ENCOUNTERED AT 399 FEET INCHES 477 FEET INCHES 533 FEET INCHES 797 FEET INCHES 903 FEET INCHES

RESULT AFTER TREATMENT (Initial open Flow or bbls.) ROCK PRESSURE AFTER TREATMENT HOURS Fresh Water Feet Salt Water Feet Pittsburgh Coal Seam Depth 903 - 910

Table with columns: Formation, Color, Hard or Soft, Top, Bottom, Oil, Gas or Water, Depth, Remarks. Rows list geological formations like consolidated Sediments, ltstone & Shale, ndstone, Calc., ltstone & Shale, ndstone, ale & Siltstone, ndstone, ale & Siltstone, ndstone.

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Lime Siltstone & Shale			210	234		
Sandstone			234	255		
Shale			255	262		
Sandstone			262	267		
Lime Shale			267	297		
Siltstone & Shale			297	362		
Limestone			362	375		
Siltstone & Shale			375	399		
Washington Coal			399	403		
Siltstone & Shale			403	477		
Waynesburg "A" Coal			477	480		
Lime Siltstone			480	498		
Limestone			498	519		
Waynesburg Sandstone			519	530		
Shale			530	533		
Waynesburg Coal			533	536		
Shale and Limestone			536	660		
Siltstone and Shale			660	797		
Sewickley Coal			797	801		
Shale & Limestone			801	903		
Pittsburgh Coal			903	910		

Date September 9 , 19 77

APPROVED U.S. ERDA . Owner

By J. E. Bernick  
(Title) Petroleum Engineer



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

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AUG - 2 1977

OIL & GAS DIVISION  
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,  
Charleston, W. Va.

Surface Owner Mr. Walter B. Smith  
Address Smithfield, WV 26437  
Mineral Owner Mr. & Mrs. Rex Smith  
Address Smithfield, WV 26437  
Coal Owner Consolidation Coal Company  
Address P.O. Box 1632, Fairmont, WV 26554  
Coal Operator \_\_\_\_\_  
Address \_\_\_\_\_

DATE July 26, 1977  
Company U. S. Energy Research & Development Administration  
Address P.O. Box 880, Morgantown, WV 26505  
Farm Walter B. Smith Acres 15  
Location (waters) Pickenpaw Run  
Well No. Smith-ERDA-PI-2 Elevation 1051.79  
District Grant County Wetzel  
Quadrangle Mannington

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 12-4-77.

Robert H. ...  
Deputy Director - Oil & Gas Division

INSPECTOR TO BE NOTIFIED Phil Tracy  
PH: 758-4573 ADDRESS Middlebourn, W. Va.

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for ~~XXXXXX~~ research purposes ~~XXXXXX~~ consolidation ~~XXXXXX~~ cooperative agreement having fee title thereto, (or as the case may be) under ~~XXXXXX~~ dated 14 June 19 74 by Consolidation Coal Co. made to The U.S. of America and recorded on the Fourth day of March 19 77, in Wetzel County, Book #45 Page 173 Miscellaneous

XXX NEW WELL \_\_\_\_\_ DRILL DEEPER \_\_\_\_\_ REDRILL \_\_\_\_\_ FRACTURE OR STIMULATE  
\_\_\_\_\_ OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. \*

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address \_\_\_\_\_ day \_\_\_\_\_ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL  
GEOPHYSICAL LOGS DIRECTLY TO:

West Virginia Geological and Economic Survey  
P. O. Box 879  
Morgantown, W. Va. 26505

Very truly yours,

(Sign Name)

L. D. Strickland  
Well Operator L. D. Strickland

Address  
of  
Well Operator

Morgantown Energy Research Center  
P.O. Box 880  
Morgantown  
City or Town  
West Virginia 26505  
State

\*SECTION 3 . . . . If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

THIS IS AN ESTIMATE ONLY  
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO XXX DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE-STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:  
 NAME Paramount Exploration, Inc. NAME L. D. Strickland  
 ADDRESS P.O. Box 551, Waynesburg, PA. ADDRESS P.O. Box 880  
 TELEPHONE 412/627-6144 15370 ADDRESS Morgantown, WV 26505  
 ESTIMATED DEPTH OF COMPLETED WELL: 915 ft. TELEPHONE 599-7494  
 PROPOSED GEOLOGICAL FORMATION: Pittsburgh coal ROTARY X CABLE TOOLS \_\_\_\_\_  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS \_\_\_\_\_ COMB. \_\_\_\_\_ STORAGE \_\_\_\_\_ DISPOSAL \_\_\_\_\_  
 RECYCLING \_\_\_\_\_ WATER FLOOD \_\_\_\_\_ OTHER \*

TENTATIVE CASING PROGRAM:

\*Underground Coal Gasification  
Research

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 (10)	200 ft.	200 ft.	Surface to 200 ft.
9 - 5/8			
8 - 5/8			
7	900 ft.	900 ft.	Surface to 900 ft.
5 1/2			
4 1/2			
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 40 FEET SALT WATER \_\_\_\_\_ FEET  
 APPROXIMATE COAL DEPTHS 900 ft.  
 IS COAL BEING MINED IN THE AREA? No BY WHOM? \_\_\_\_\_

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for Consolidation Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the Consolidation Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

*Ray M Henderson*  
 \_\_\_\_\_  
 For Coal Company  
*Regional Manager of Engineering and*  
 \_\_\_\_\_  
 Official Title  
*Environmental Affairs*

